Volume 8 Issue 5 (2024) Pages 1277-1284
**Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini**
ISSN: 2549-8959 (Online) 2356-1327 (Print)

# The Influence of The Traditional Game Cakbur on the Rude Motor Abilities of 5-6 Year-Old Children in Kindergarten

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DOI: 10.31004/obsesi.v8i5.6098

## Abstrak
Motorik kasar merupakan suatu gerak tubuh yang menggunakan otot-otot besar, sebagian besar atau seluruh tubuh, yang dipengaruhi oleh umur, berat badan dan perkembangan fisik anak. Tujuan penelitian ini adalah untuk mengetahui seberapa besar pengaruh permainan tradisional Cakbur terhadap kemampuan motorik kasar anak usia 5-6 tahun di Paud Tunas Harapan Kecamatan Tambang Kampar. Jenis penelitian ini adalah penelitian eksperimen dengan menggunakan desain one group design dengan pretest dan posttest melalui lembar observasi. Hasil penelitian dan pembahasan disimpulkan bahwa kemampuan motorik kasar anak usia 5-6 tahun di Paud Tunas Harapan Kecamatan Tambang Kampar sebelum diberikan perlakuan melalui permainan Tradisional Cakbur berada pada nilai yang rendah. Setelah melalui permainan tradisional Cakbur kemampuan motorik kasar anak meningkat, 60% dikategorikan tinggi, 40% berkategori sedang dan tidak ada anak yang berkategori rendah.

**Kata Kunci:** *Permainan Tradisional; Galah Panjang; Motorik kasar*

## Abstract
The rough motor is a body movement that uses large muscles, most or all of the body, which is influenced by the child's age, weight and physical development. This study aimed to determine how much influence the traditional game of Cakbur had on the gross motoric abilities of children aged 5-6 years in Paud Tunas Harapan, Tambang District, Kampar. This type of experimental research uses one group design with pretest and posttest through observation sheets. The results of the study and from the discussion concluded that the gross motoric ability of children aged 5-6 years in Paud Tunas Harapan, Tambang District, Kampar, before being given treatment through the Traditional Cakbur game at a low value. After going through the traditional game Cakbur, the gross motor abilities of children increased; 60% were categorized as high, 40% as moderate, and no children in the low category.

**Keywords:** *Traditional Games; Galah Panjang; Motoric rough*



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Received 23 July 2024, Accepted 24 October 2024, Published 24 October 2024

DOI: 10.31004/obsesi.v8i5.6005

## Introduction

Education is a long-term investment that requires considerable funds and effort. Education functions to improve the quality and quality of society so that they can live better. In Indonesia, early childhood education is education that is currently developing very quickly and rapidly and is a vehicle for instilling basic concepts or foundations in children before children receive learning at the next level of education (Mayar et al., 2019). Growth and development in children can be seen from 6 aspects, the six aspects are religious and moral values, growth in children's cognitive abilities, growth in language abilities, physical and motoric development, as well as development in social and emotional aspects (Sukatin et al., 2019) . Physical motor development is an aspect that needs to be improved in early childhood education, because this development can influence children's lives (Zeng et al., 2017).

Physical development includes the development of the body, gross muscles and fine muscles, which are then referred to as gross motor skills and fine motor skills. Gross motor skills also involve large muscle movements in children, where the activities carried out are throwing, jumping, crawling and hopping (Wandi and Mayar, 2019). As conveyed by (Maghfiroh Lailatul, 2019), physical motor development is the control of body movements through activities. conditioned nerves and muscles. One aspect that is very important to stimulate in children is gross motor skills. It is important to improve children's gross motor skills because gross motor skills are an ability that helps children carry out daily activities such as jumping, running, walking and standing on one leg (Bambang, 2008). Gross motor skills are activities using large muscles which include basic locomotor, non-locomotor and manipulative movements such as throwing, catching and kicking. Meanwhile, fine motor skills are activities that use small muscles in the hands and wrist muscles, such as scissoring, cutting and writing (Gallahue, 2012).

Traditional games can be given to early age students to optimize children's gross motor skills, one of which is running. Providing exercises to strengthen children's muscles is aimed at getting children used to being able to do them well, teaching them about traditional games and measuring children's abilities. Safitri et al., (2018) revealed that development is change from creation to maturity, and the process lasts throughout life. Lestari and Prima (2017) explain that development is an individual's motoric changes from young to adult. Meanwhile, according to Lubis and Khadijah (2018), gross motor skills are body movements involving muscles, which are influenced by the individual's level of maturity. Hasanah (2016) expressed his opinion that gross motor skills involve the movement of some or all of the body parts. Gross motor skills can be seen from the level of endurance, speed, flexibility, strength and balance.

The functions of traditional games include developing children's physical motor skills (Ali & Aqobah, 2020) and character building (Ali & Lumintuarso, 2017) as a way to stimulate social skills in early childhood (Zakiya, 2020). Traditional games can help children with social skills (Irmansyah et al., 2020). Through play, children can express themselves, so that it will give birth to various creativity and skills that can later support success in life, such as being able to train leadership, cooperation, discipline, honesty and independence (Irman, 2017). One of them is the traditional game cak bur, which is one of the most popular games among children and the Malay community in Riau Province.

The Cak Bur game is known as the Galahpanjang game. This game is called Cak Bur because when the game starts, the guard says "Cak", and when the game ends, the player says "Bur". This game is played by 2 teams, each consisting of several people. The game of cakbur also teaches sportsmanship and mutually agreed-upon rules of the game. With movements such as running, dodging, and jumping, children are physically trained actively. So, by playing the traditional game of cakbur, children can hone their gross motor skills and reflexes.

Based on the results of observations and phenomena in the field during research work at Tunas Harapan Early Childhood Education, Tambang District, Kampar Regency, weaknesses were found, namely, that the majority of children when running were not able to

DOI: 10.31004/obsesi.v8i5.6005

react quickly to the stimuli given by the teacher so that to reach the goal it took a long time, a small number of children not yet able to change direction of position quickly, the teacher is less creative in presenting activities in the form of games and is a little monotonous. This research was conducted because researchers will discuss specifically the focus studied in this research. This study aims to reveal improvements in motor skills of young children through traditional games at Tunas Harapan Early Childhood Education, Tambang District, Kampar Regency.

## Methodology

The focus of this research is that it is carried out using a quantitative approach. The research design used in this research is using a true experimental design with a Pretest-Posttest Control Group Design. In this design, there are two groups selected at random, then given a pretest to find out whether there are any differences between the experimental group and the control group (Sugiyono, 2012: 112). This research was conducted in May 2024 involving 15 children (N=15), as well as subjects namely children in the age range of 5-6 years who were selected from class B at Paud Tunas Harapan, Tambang District, Kampar Regency who implemented the traditional game cakbur for can improve gross motor skills in young children. The instrument used in carrying out this research was a gross motor test in early childhood. Below is Figure 2 which shows the One-Group Pretest-Posttest design research design theme.

**Table 1. Research Design**

| $O_1$ | $X$ | $O_2$ |
|---|---|---|
| $O_3$ | | $O_4$ |

*Source: Sugiyono (2012)*

This study's series of research procedures was conducting a pretest to determine the level of gross motor skills of children aged 5-6 years. Then the children are given treatment through traditional cakbur game activities. After the children had been given treatment, a posttest was carried out to determine the effect of the traditional cakbur game on the gross motor skills of children aged 5-6 years. Data collection techniques in this research used observation and tests on children. The data obtained was then analyzed quantitatively to compare the results of the treatment given to children.

**Result and Discussion**

After being given treatment by implementing the traditional cakbur game, based on the results and discussions about the traditional cakbur game to increase focus on gross motor skills in early childhood it was proven to be effective. In this study, the researcher carried out three tests: the first was a normality test, the second was a homogeneity test, and the third was a hypothesis test using the SPSS 20.0 program, which analyzed and processed the data to be able to determine whether there were differences in means both before and after testing. This research assumes that if sig. (2-tailed) < 0 > 0.05, so there is no significant difference between motor abilities in the data before and after the test. Table 2 shows the results of this research before and after testing.

Below, to make it clearer about children's gross motor skills before and after playing the traditional Cakbur game, you can see the comparison in table 2 of the results before and after the action, there is an increase in children's gross motor skills before they have the criteria to start developing, there are 3 indicators and there are 2 developing according to expectations. indicator. So after the action, the criteria developed very well; there were 2 indicators and developed according to expectations for 3 indicators.

DOI: 10.31004/obsesi.v8i5.6005

**Table 2. Children's gross motor skills before and after the action**

| *NO* | *Indicator* | *Before %* | *Criteria* | *After %* | *Criteria* |
|---|---|---|---|---|---|
| *1* | *Run swiftly* | *55* | *MB* | *87,5* | *BSB* |
| *2* | *Body balance by lifting 1 leg by jumping* | *50* | *MB* | *80* | *BSH* |
| *3* | *Change body direction or position quickly and precisely* | *38,75* | *MB* | *72,5* | *BSH* |
| *4* | *Turning the whole body* | *37,75* | *BSH* | *71,25* | *BSH* |
| *5* | *Children run distances quickly* | *40* | *MB* | *71,25* | *BSH* |

*Source: Processed research data*
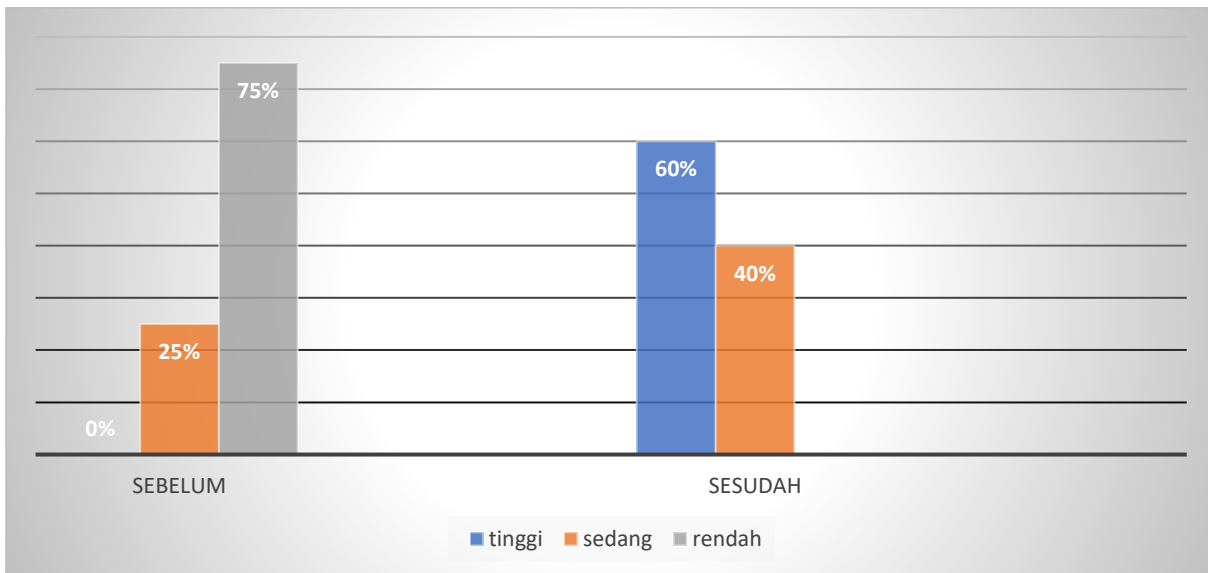
**Figure 1. Children's gross motor skills before and after playing the traditional game Cakbur**

Based on Figure 1 and Table 2 above, the before and after comparison above can be seen that the majority of children experienced an increase in their gross motor skills, initially being in the low category, as many as 15 children or 75%, then in the medium category as many as 5 people or 25%. There were no in the high category or called 0%. Then, when playing the traditional game Cakbur, children's gross motor skills increased, namely in the high category by 12 children or 60%, in the medium category by 8 children or 40%, and in the low category none or 0%. Research analysis was carried out using parametric statistics. Before carrying out parametric statistical tests, the research first tests the analysis requirements, namely:

## Normality test

The normality test is carried out to determine whether the data distribution is normally distributed or not. Test the normality assumption using SPSS Windows ver 20.0 with the one simple Kolmogorov-Smirnov non-parametric statistical technique. The conditions used are if the Sig value is <0.05, then the data is not normally distributed; conversely, if the Sig value is>0.05, then the data is normally distributed. The results of the normality test can be seen in the table 3.

From the results of table 3, the normality test results can be seen from the pretest sig value of 0.375 and the posttest sig value of 0.501. This value shows that the sig value is greater than the significance level α = 0.05 so that Ho is accepted and Ha is rejected

DOI: 10.31004/obsesi.v8i5.6005

**Table 3. Normality Test Results**

| *One-Sample Kolmogorov-Smirnov Test* | | | |
|---|---|---|---|
| | | *Preetest* | *Postes* |
| *N* | | *20* | *20* |
| *Normal Parameters[a,,b]* | *Mean* | *9.00* | *15.30* |
| | *Std. Deviation* | *1.864* | *2.029* |
| *Most Extreme Differences* | *Absolute* | *.204* | *.185* |
| | *Positive* | *.204* | *.139* |
| | *Negative* | *-.146* | *-.185* |
| *Kolmogorov-Smirnov Z* | | *.913* | *.827* |
| *Asymp. Sig. (2-tailed)* | | *.375* | *.501* |

*a. Test distribution is Normal.*
*b. Calculated from data.*

*Source: Processed research data*

**Homogeneity Test**

The homogeneity test is intended to show that two or more sample data groups come from populations with the same variance. In regression analysis, the analysis requirements needed are that the regression line for each grouping based on the dependent variable has the same variance.

**Table 4. Homogeneity Test Results**

| *Test of Homogeneity of Variances* | | | |
|---|---|---|---|
| *Posttest* | | | |
| *Levene Statistic* | *df1* | *df2* | *Sig.* |
| *.697* | *3* | *14* | *.569* |

*Source: Processed research data*

Thus, homogeneity is fulfilled if the test results are insignificant for a significance level of α = 0.05, the same as the normality test. In the sig column, there is a number that shows the level of significance obtained. If the significance obtained is > α (0.5), then the variance of each sample is the same (homogeneous); if the significance obtained is < α (0.05), then the variance of each sample is not the same (not homogeneous). Sig statistics were obtained from the test results using SPSS Windows For Ver 17. 0.569 is much greater than 0.05 (0.569 > 0.05). Thus, it can be concluded that this research data is homogeneous.

**Linearity Test**

Linearity testing aims to determine whether the data corresponds to a linear line (whether the relationship between the variables to be analyzed follows a straight line). The linearity test in this study used SPSS Windows ver. 20.00. To find out more, see the table 5.

Based on the significance value, a significance value of 0.223 is greater than 0.05, which means there is a significant linear relationship between the pretest variable and the posttest variable. At the F = value, the calculated F value = 1.626, while the F table in the distribution table shows an F value of 0.05 with a df number of 4.14 = 3.11. Because the calculated F value is small from the F table, it can be concluded that there is a significant linear relationship between the pretest and posttest variables

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**Table 5. Linearity Test Results**

| *ANOVA Table* | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | *Sum of Squares* | *df* | *Mean Square* | *F* | *Sig.* |
| *posttest * pretest* | *Between Groups* | *(Combined)* | *57.250* | *5* | *11.450* | *7.652* | *.001* |
| | | *Linearity* | *47.515* | *1* | *47.515* | *31.752* | *.000* |
| | | *Deviation from Linearity* | *9.735* | *4* | *2.434* | *1.626* | *.223* |
| | *Within Groups* | | *20.950* | *14* | *1.496* | | |
| | *Total* | | *78.200* | *19* | | | |

*Source: Processed research data*

## Hypothetical Test

Hypothesis testing in this research uses the Wilcoxon test method. To see the differences before and after treatment and to see how much influence playing the traditional Cakbur game has. Before seeing whether there is an influence on children's initial reading abilities before and after the experiment, it is necessary to look at the relationship between pretest and posttest data as in the table below:

**Tabel 6. Paired Sample Correlation**

| *Paired Samples Correlations* | | | | |
|---|---|---|---|---|
| | | *N* | *Correlation* | *Sig.* |
| *Pair 1* | *posttest & pretest* | *20* | *.779* | *.000* |

*Source: Processed research data*

Based on the table above, it can be seen that the correlation coefficient for pretest and posttest data is r = 0.779 and p = 0.000. because the p-value <0.05, Ha is accepted as a significant difference in children's gross motor skills after the influence of playing the traditional long pole game.

**Table 7. Wilcoxon Signed Ranks Test Results**

| *Test Statistics*[b] | |
|---|---|
| | *postes – Preetest* |
| *Z* | *-3.956*[a] |
| *Asymp. Sig. (2-tailed)* | *.000* |

*Source: Processed research data*

With the condition that the significance is 0.000 < 0.05, then Ha is accepted, and Ho is rejected, meaning that the hypothesis states a difference in children's gross motor skills after playing the traditional long pole game. The table above shows an average difference of -3.956a and a sig (2-tailed) value of 0.000. This means that the sig value is <0.05, so ha is accepted and ho is rejected.

## Discussion

Gross motor skills require energy to carry out every activity such as playing, meaning that gross motor skills are related to the child's kinesthetic intelligence to carry out movements in their activities. Traditional games can be used to improve children's gross motor skills because they have goals and designs that can regulate children's activities according to the wishes of educators (Nolte et al., 2022). The results of observations on the gross motor skills of young children before playing the traditional Cakbur game before treatment for each indicator

DOI: 10.31004/obsesi.v8i5.6005

were classified as Starting to Develop and Developing According to Expectations. Before playing the traditional long pole game, the score was 180 and an average of 9. If seen in individual categories then before there was Actions in the high category were 0 children with a percentage of 0%, in the medium category there were 5 children with a percentage of 25%, in the low category there were 15 children with a percentage of 75%. Based on these observations, researchers conducted research to improve children's gross motor skills by playing the traditional game Cakbur. Gross motor skills require energy to carry out every activity such as playing, meaning that gross motor skills are related to children's kinesthetic intelligence to carry out movements in their activities.

Increased motor skills occur in line with improving eye, foot and hand coordination. Motor development can occur well if children have sufficient opportunities to carry out physical activities in the form of movements that involve all parts of the body (Cheraghi et al., 2022). Almost all children need quite a lot of energy every day to carry out the various activities they will do. Therefore, gross motoric learning is very important for children because it is closely related to the development of life both at school and outside school. Gross motor learning can be done with various indoor and outdoor activities, traditional and modern.

Gallahue divides motor skills into three categories, namely: locomotor movements carried out to move the body from one place to another, walking and jumping, then non-locomotor movements carried out in a place without moving the body, such as bending and stretching, walking in place and pedalling. alternately, the latter is manipulative movements involving the hands and feet. The benefits of the Gobak Sodor game are to increase solidarity for children, entertain themselves, foster creativity, and form a good personality, train children's skills and physique to become strong (Arlina et al., 2022). Based on the statements above, it can be concluded that the traditional Cakbur game in this study can improve children's gross motor skills so that with better gross motor skills, children will be able to interact with others.

## Conclusion

The traditional game Cakbur can effectively improve gross motor skills in young children. This can be seen when comparing children's skill scores to pre-test scores. Before the start of treatment, the skill value is on the child's post-test score after the treatment or implementation of the traditional Cakbur game. From the data obtained after treatment, young children's motor skills can increase. This increase in gross motor skills in early childhood can be seen in the movement activities used in the traditional Cakbur game. When children play the traditional Cakbur game, children's gross motor skills appear to improve, apart from that, children also feel very happy and very enthusiastic about participating in a series of activities.

## Acknowledgement

Thank you to the school for accepting me to conduct research at Tunas Harapan Early Childhood Education, Tambang District, Kampar Regency. From the results of interviews submitted to the school principal and the teachers who are very responsive in conveying about the school and the development of the children there, from what the children use to show their physical motoric development to the results. development of these children. Their response was so open, which made me feel calm when conducting research at the school.

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